ATTORNEY'S DOCKET NO.: U0128/7028/PCL/LEW

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Eric J. Redemann and Kim N. Vu

Serial No:

Not yet assigned

Filed: For:

Herewith GAS PANEL

Examiner:

Not yet assigned

Art Unit:

Not yet assigned

#### CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner for Patents, Washington, D.C., 20231, on the 330 ay of August, 2001.

Robyn Lecesse

Box Patent Application Commissioner for Patents Washington, D.C. 20231

Sir:

## PRELIMINARY AMENDMENT

Prior to examination, please amend the above-identified application as follows:

Please add the following new claims:

23. A gas panel comprising:

a first manifold having an inlet and an outlet accessing a common surface of the first manifold, and a fluid passageway connecting the inlet of the first manifold to the outlet of the first manifold and defining from the inlet of the first manifold to the outlet of the first manifold a generally lateral first flow direction;

a second manifold having an inlet and an outlet accessing a common surface of the second manifold, and a fluid passageway connecting the inlet of the second manifold to the outlet of the second manifold and defining from the inlet of the second manifold to the outlet of the second manifold a generally lateral second flow direction; and

a bridging component having an inlet and an outlet accessing a common surface of the bridging component, and a fluid passageway connecting the inlet of the bridging component to the outlet of the bridging component and defining from the inlet of the bridging component to the outlet of the bridging component a generally lateral third flow direction;

wherein the inlet of the bridging component is fluidly connected to the outlet of the first manifold and the outlet of the bridging component is fluidly connected to the inlet of the second manifold, and the third flow direction is generally transverse to the first flow direction.

- 24. The gas panel of claim 23, wherein the bridging component is an active component.
- 25. The gas panel of claim 24, wherein the active component is a valve.
- 26. The gas panel of claim 23, wherein the bridging component is a connector block.
- 27. The gas panel of claim 23, wherein the third flow direction is generally transverse to the second flow direction.

## 28. A gas panel comprising:

a first manifold having an inlet and an outlet accessing a common surface of the first manifold, and a fluid passageway connecting the inlet of the first manifold to the outlet of the first manifold and defining from the inlet of the first manifold to the outlet of the second manifold a generally lateral first flow direction;

a second manifold having an inlet and an outlet accessing a common surface of the second manifold, and a fluid passageway connecting the inlet of the second manifold to the outlet of the second manifold and defining from the inlet of the second manifold to the outlet of the second manifold a generally lateral second flow direction; and

a bridging component having an inlet and an outlet accessing a common surface of the bridging component, and a fluid passageway connecting the inlet of the bridging component to the outlet of the bridging component and defining from the inlet of the bridging component to the outlet of the bridging component a generally lateral third flow path;

wherein the inlet of the bridging component is fluidly connected to the outlet of the first manifold, and the outlet of the bridging component is fluidly connected to the inlet of the second manifold, and the third flow direction is aligned with the first flow direction.

- 29. The gas panel of claim 28, wherein the bridging component is an active component.
- 30. The gas panel of claim 29, wherein the active component is a mass flow controller.
- 31. The gas panel of claim 29, wherein the active component is a valve.
- 32. The gas panel of claim 28, wherein the bridging component is a connector block.
- 33. The gas panel of claim 28, wherein the second flow direction is aligned with the third flow direction.
- 34. The gas panel of claim 33, wherein the active component is a mass flow controller.

## 35. A gas panel comprising:

a first manifold having an inlet and an outlet accessing a common surface of the first manifold, and a fluid passageway connecting the inlet of the first manifold to the outlet of the first manifold and defining from the inlet of the first manifold to the outlet of the first manifold a generally lateral first flow direction;

a second manifold having an inlet and an outlet accessing a common surface of the second manifold, and a fluid passageway connecting the inlet of the second manifold to the outlet of the second manifold and defining from the inlet of the second manifold to the outlet of the second manifold a generally lateral second flow direction; and

an active component having an inlet and an outlet accessing a common surface of the active component, and a fluid passageway connecting the inlet of the active component to the outlet of the active component and defining from the inlet of the active component to the outlet of the active component a generally lateral third flow direction;

wherein the inlet of the active component is adapted to directly mate to the outlet of the first manifold and the outlet of the active component is adapted to directly mate to the inlet of the second manifold.

- 36. The gas panel of claim 35, wherein the active component is a valve.
- 37. The gas panel of claim 35, wherein the active component is a mass flow controller.

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38. The gas panel of claim 35, wherein the inlet of the active component is adapted to directly mate from a first direction to the outlet of the first manifold.

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#### **REMARKS**

This application is a divisional application, under 37 CFR 1.53(b) of pending Application Serial No. 09/732,434, filed December 7, 2000, entitled GAS PANEL, now pending, which is a divisional of application serial number 09/371,655, filed August 10, 1999, entitled GAS PANEL, now U.S. Patent No. 6,189,570, which is a divisional of application serial number 08/739,936, filed October 30, 1996, entitled GAS PANEL, now U.S. Patent No. 5,992,463. Entry of the above amendments before the first action is respectfully requested. Moreover, in view of these amendments, consideration and allowance of all claims in the application are respectfully requested. Of course, the Examiner is invited to telephone the undersigned attorney, if necessary, so that prosecution of this application may be expedited.

Respectfully submitted,

Peter C. Lando, Reg. No. 34,654

Lisa E. Winsor, Reg. No. 44,405

WOLF, GREENFIELD & SACKS, P.C.

600 Atlantic Avenue Boston, MA 02210

(617)720-3500

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Applicant:

Eric J. Redemann and Kim N. Vu

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August 10, 1999

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GAS PANEL

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J. Fox 3753

Art Unit:

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# **CERTIFICATE UNDER 37 CFR 3.73(b)**

Sir:

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UNIT INSTRUMENTS, INC., a California corporation, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of a claim of title from the inventors of the patent application identified above to the current assignee as shown below:

1. From: Eric J. Redemann and Kim N. Vu To: Unit Instruments, Inc., dated April 1, 1997, recorded on Reel 8468, Frame 0199.

The undersigned is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

UNIT INSTRUMENTS, INC.

Date: May 10, 2000

Name: 5

itle: Vice President and